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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,299	08/27/2003	Robert C. Hansen	POU920030123US1	6669
46429 7590 12/28/2007 CANTOR COLBURN LLP-IBM POUGHKEEPSIE 20 Church Street 22nd Floor Hartford, CT 06103			EXAMINER BUI, BRYAN P	
			ART UNIT 2153	PAPER NUMBER
			MAIL DATE 12/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/650,299

Applicant(s)

HANSEN ET AL.

Examiner

Bryan P. Bui

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is responsive to the Amendment filed on 09/25/2007. Claims 1-18 are pending of which claims 1-3, 7-9, and 13-18 are amended, claims 1, 7 and 13 are independent claims.

Response to Amendment

2. Applicant's amendments to the specification appropriately address the objections due to the informalities. Accordingly, these objections are withdrawn in view of Applicant's amendments.

3. Applicant's amendments to the claims appropriately and effectively overcome the rejections under 35 U.S.C. 101 and 35 U.S.C. 112 raised in the previous office action. Accordingly, these rejections are withdrawn in view of Applicant's amendments.

Response to Arguments

4. Applicant's arguments, see page 7 lines 21-26, filed on 09/25/2007, with respect to the rejection(s) of claim(s) 1-18 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the references cited in the previous rejections (OGSI, Brown et al., Java and Wilding-McBride).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 7-9, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over OGSi (an article entitled "Open Grid Services Infrastructure (OGSI)"- Version 1.0) dated June 27, 2003, in view of Brown et al. (US Application No. 2003/0110242 A1).

Regarding claim 1, OGSi teaches a method comprising:

A) "establishing an open grid service infrastructure(OGSi) instance (see OGSi, Page 7, section 3.1, lines 3- and section 12.2.1 Factory:: createService) including an OGSA container" (OGSi, Page 11 section 3.4 and Figure 3); and

B) "establishing an OGSA service and an OGSA descriptor including an OGSA container attribute needed for said OGSA service" (see OGSi, Page 11,

section 4 "The Grid service" and Page 16, 17 section 6.2.1)

With respect to A), it is noted that OGSi teaches the claimed features of "establishing an open grid service infrastructure(OGSI) instance" as "The factory createService creates a new Grid service instance" (Page 55), and "including an OGSA container" as "Grid service instances (the ovals) associated with container-managed components (e.g., EJBs within a J2EE container)" (see OGSi, Page 11, section 3.4).

With respect to B), it is noted that OGSi teaches the claimed features of "establishing an OGSA service and an OGSA service descriptor including an OGSA container attribute needed for said OGSA service" as "[a] grid service is a WSDL-defined service that conforms to a set of conventions relating to its interface definitions and behaviors" (see Page 11, section 4) and "the entire behavior of a Grid service instance is completely encapsulated within the component" (Page 11, section 3.4).

However, OGSi does not expressly disclose the claimed features of "deploying said OGSA service to said OGSi instance"; and "comparing said OGSA container attribute to a characteristic of said OGSA container"; and "supporting said OGSA service on said OGSA container when said attribute matches said characteristic". Brown et al., from the same or similar field of endeavor, teaches a method for dynamic reconfiguration of Web services infrastructure, wherein Web service containers

may be deployed at client machines to manage Web service related tasks(see Brown , paragraph [0018]) and those claimed limitations were taught .(see Brown, paragraphs [0036], [0039] together with Fig. 3). Thus, it would be obvious to someone of ordinary skill in the art at the time the invention was made to combine the teachings of Brown's with the teaching of OGSI because teaching Brown's would have allowed OGSI's to provide a method and apparatus for dynamically reconfiguring Web services infrastructure based upon context (see Brown, paragraph [0014]).

Regarding claim 3, OGSI discloses the claimed feature of "generating an error message if said attribute does not match said characteristic" as "an error is generated when the instance is created" (see OGSI, section 6.4.1, Page 23-24). Most of the limitations of this claim have been noted in the rejection of claim 1, so it is rejected as set forth above.

Regarding claim 7, OGSI discloses the claimed feature of "an administrator system establishing an open grid infrastructure (OGSI) instance including an OGSA container", "a grid network coupled to said grid network" and "a grid resource coupled to said grid network" by providing a distributed system framework based on the Open Grid Services Infrastructure (OGSI) (see OGSI, Page 5) and a hosting environment (see OGSI, Page 6 together with section 3.3, 3.4, Page 9-11). The rest of the limitations of this claim have been noted in the rejection of claim 1, so it is rejected as set forth above.

Regarding claim 9, all of the limitations of this claim have been noted in the rejection of claim 3 and claim 7, therefore it is rejected as set forth above.

Regarding claim 13, OGSi does not explicitly disclose the claimed feature of "[A] medium encoded with a machine readable computer program code for managing open grid service architecture(OGSA) services". Brown et. al, from the same or similar field of endeavors, discloses a computer program product recorded on computer readable medium for organizing and manipulating Web services (see Brown, claim 1). Thus, it would be obvious to someone of ordinary skill in the art at the time the invention was made to combine the teachings of Brown's with the teaching of OGSi because teaching Brown's would have allowed OGSi's to provide a method and apparatus for dynamically reconfiguring Web services infrastructure based upon context (see Brown, paragraph [0014]).

Regarding claim 15, all of the limitations of this claim have been noted in the rejection of claim 3 and claim 13, therefore it is rejected as set forth above.

Regarding to claims 2, 8, and 14, OGSi does not explicitly teach the claimed feature of "reconfiguring said OGSA container if said attribute does not match said characteristic to support said OGSA service". However, Brown et al. teaches a method and apparatus for dynamic reconfiguration of web services

infrastructure, wherein the previously running servers can reconfigure themselves to act as routers to send all requests by proxy to new server (see Brown et al., paragraph [0093] together with Fig. 4G (254) and Fig. 4H (252)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brown's with the teaching of OGSi because teaching Brown's would have allowed OGSi's to provide a method and apparatus for dynamically reconfiguring Web services infrastructure based upon context (see Brown, paragraph [0014]).

6. Claims 4, 5, 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over OGSi (an article entitled "Open Grid Services Infrastructure (OGSi)"- Version 1.0) dated June 27, 2003, in view of Brown et al. (US Application No. 2003/0110242 A1) as applied to claims 1, 7, and 13 above, and further in view of Java (Article entitled "Java Programmer's Guide").

Regarding claims 4, 10, and 16, neither OGSi nor Brown explicitly teaches the claimed feature of "providing a user interface for managing OGSi instances, said user interface providing a tool for creating an OGSi instance for supporting OGSA services". However, Java teaches some additional APIs and features provided by a framework for more advanced service developers (see the introduction of Java together with Part II: Additional APIs). Specifically, Java

discloses a GUI framework (see Java, Page 6, section 3.1 GUI client), wherein a test method of GUI client including "create an instance in the Factory panel" is provided (see Java, Page 6, step 3 to test your GUI client).

Regarding claims 5, 11, and 17, neither OGSi nor Brown explicitly teaches the claimed feature of "said creating said OGSi instance includes identifying a port of a grid resource to support said OGSi instance". However, Java discloses that a service container API is provided to start embedded local hosting environments listening on particular ports (see Java, Page 14, section 10: Service Container). Additionally, Java further teaches that the NotificationSinkManager API (see Page 10, section 5 Notifications) makes use of this API to multiplex all sink URLs exposed over a single port(per transport).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the teachings of Java's with the cited references because teaching Java's would have allowed OGSi's and Brown's to provide some additional APIs and features for the more advanced service developers.

7. Claims 6, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over OGSi (an article entitled "Open Grid Services Infrastructure

(OGSI)"- Version 1.0) dated June 27, 2003, in view of Brown et al. (US Application No. 2003/0110242 A1) as applied to claims 1, 7, and 13 above, and further in view of Wilding-McBride (Book entitled "Java Development on PDAs: Building Applications for PocketPC and Palm Devices).

Regarding to claims 6, 12, and 18, neither OGSI nor Brown explicitly teaches the claimed feature of "providing a user interface for said deploying said OGSA service, said user interface including a tool for undeploying said OGSA service". Wilding-McBride, however, teaches "To undeploy the web service, we again use the Axis administration client. The Ant build file defines a target to undeploy the image service, called UndeployImageService" (see Wilding-McBride, Page 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the teachings of Wilding-McBride with the cited references because teaching Wilding-McBride's would have allowed OGSI's and Brown's to provide a method and a system to remove an existing web service to allow for new updates and newer services to appear on a host (see also Page 15) .

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hodges et al. (US Patent Application Pub. No. 2004/0123232 A1)

Davis et al. (US Patent Application Pub. No. 2004/0068731 A1)

Berkland et al. (US Patent Application Pub. No. 2004/0117425 A1)

Upton (US Patent Application Pub. No. 2003/0105884 A1)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Bui whose telephone number is (571)-270-1981. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)-272-3949. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system,

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contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from USPTO Customer Service Representative or access to the automated information system, call 1-(800)-786-9199 (in U.S.A or Canada) or 1-(571)-272-1000.

BB



NATHAN FLYNN
SUPERVISORY PATENT EXAMINER